

REMARKS

The Official Action of September 22, 2005, and the prior art cited and relied upon therein have been carefully studied. The claims in the application are now claims 1, 2 and 5-11, and these claims define patentable subject matter warranting their allowance. Favorable reconsideration and such allowance are respectfully urged.

Claims 3, 4 and 12 have been canceled. Claims 1, 2 and 5-11 remain in the application for consideration.

The Examiner continues to reject claims 1-12 under 35 U.S.C. §102(b) as being anticipated by JP 2002-126907. Applicant respectfully traverses this rejection as applied to amended independent claim 1.

According to the claimed invention, the acceleration in reciprocation of the slider is set to a preselected acceleration. The rpm of the spindle is controlled in conformity with the preselected acceleration of the slider to make synchronization with the movement of the slider in both the Y-axis and X-axis directions, thereby generating the desired curved surface on the workpiece. The structure of the claimed invention is intended to help the processor produce its highest processing power at any given time.

The acceleration of the slider of the claimed invention is controlled to have its top acceleration and correspondingly the rpm of the spindle is varied so as to produce the highest possible output of the claimed processor. Upon circular cutting of a workpiece, the circular velocity of the turning workpiece is high at the circumferential fringe largest in radius. Thus, if the acceleration criterion or standard exerted on the slider is set so as to be able to respond to the high circular velocity at the circumferential fringe largest in radius, the spindle on cutting operation at a radially inward position less in radius would be allowed to rotate with the circular velocity higher than that at the circumferential fringe largest in radius. This results in the processor operating at its highest power or ability throughout the overall processing phases.

JP'907 is a commonly assigned patent application which is explained in the "Background Of The Invention" section of the present specification.

In comparison, the processor disclosed in JP'907 is not controlled by its acceleration criterion to force the slider in reciprocating manner, but is controlled by the rpm of the spindle, which is fixed at a predetermined value. Accordingly, JP'907 does not provide the highest of its

processor's intrinsic power or ability. With circular working to generate, for example, a lens surface as disclosed in JP'907, where the circular working is carried out based on the rpm of the spindle as opposed to the processor of the claimed invention, the circular velocity of the workpiece is high in circumferential fringe largest in radius and gets less as the cutting operation proceeds away from the circumferential fringe toward the center of the workpiece. This means the processor of JP'907 falls short of exhibiting its full ability during the working operation, resulting in less use in working velocity. JP'907 clearly does not suggest or teach the technical concept of the claimed invention which makes better use of the processor.

JP'907 disclose only that the processor in which the slider is installed on the X-table is driven by the linear motor to move in and out at high speed/high acceleration because of less weight. JP'907 does not disclose a working operation controlled by the acceleration criterion of the slider as claimed.

Acknowledgement by the PTO of the receipt of applicants' papers filed under Section 119 is noted.

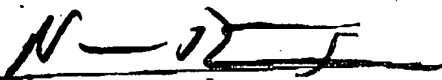
Appln. No. 10/822,681  
Amdt. dated December 19, 2005  
Reply to Office Action of September 22, 2005

The prior art documents made of record and not relied upon have been noted along with the implication that such documents are deemed by the PTO to be insufficiently pertinent to warrant their applications against any of applicant's claims.

Favorable reconsideration and allowance are earnestly solicited.

Respectfully submitted,

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